CAMBRIA

April 7, 2005

Mr. John Jang
Regional Water Quality Control Board (RWQCB)
San Francisco Bay Region
1515 Clay Street, Suite 1400
Oakland, CA 94612

Re: **Subsurface Investigation Report**
Chevron Service Station 9-4737
90 Madera Boulevard
Corte Madera, California
UST File No. 21-0034 (JMJ)

Dear Mr. Jang:

On behalf of Chevron Environmental Management Company (ChevronTexaco), Cambria Environmental Technology, Inc. (Cambria) is submitting this *Subsurface Investigation Report* for the site referenced above. Cambria installed monitoring well MW-4 to further evaluate the extent of diesel hydrocarbons and methyl tertiary butyl ether (MTBE) in soil and groundwater. The work was performed in accordance with Cambria's *Workplan for Monitoring Well Installation and Well Destruction,* dated September 28, 2004, as approved by the RWQCB in a letter dated January 12, 2005 (Attachment A.) The site background, details of the investigation, and our conclusions and recommendations are presented below.

SITE BACKGROUND

The site is an active service station located in the northeast corner of the Town Center Corte Madera at 90 Madera Boulevard in Corte Madera, California (Figure 1). Land use in the area is mixed commercial and residential. The site is bordered to the south and west by the Town Center Corte Madera parking lot and to the east by Highway 101. The current site configuration consists of a station building, six fuel dispensers, one diesel UST, three gasoline USTs, and associated product piping (Figure 2). An accidental release of diesel fuel occurred on February 4, 1991. This initiated the installation of three monitoring wells.

Cambria Environmental Technology, Inc.

4111 Citrus Avenue
Suite 9
Rocklin, CA 95677
Tel (916) 630-1855
Fax (916) 630-1856

Previous Investigations

Used-Oil UST Replacement: In December 1990, a 550 gallon used-oil UST was removed from the site and a new used-oil tank was installed in a new location. Concentrations up to 150 mg/kg total petroleum hydrocarbons as gasoline (TPHg), and 366 mg/kg total petroleum hydrocarbons as diesel (TPHd) were reported in soil collected during UST removal. On January 10, 1991, approximately 30 cubic yards (cy) of soil were removed from the used-oil UST basin. Details are presented in Sierra Environmental Services (SES) tank removal letter, dated January 29, 1991.

Soil Excavation, Monitoring Well Installation, and Well Survey: On February 6, 1991, SES collected soil samples from the sidewalls of the renovated fuel UST basin following an accidental release of diesel. Concentrations up to 43mg/kg TPHd was reported in the soil samples. On February 11, 1991, SES collected grab-groundwater samples from the UST excavation. Hydrocarbon concentrations up to 32,000 µg/L TPHg, 410,000 µg/L TPHd, and 2,000 µg/L benzene were reported in the groundwater samples. Approximately 80 cy of soil were excavated from the perimeter of the UST basin after 20,000 gallons of water and diesel were pumped from the tank pit. On February 27, 1991, SES installed groundwater monitoring wells MW-1, MW-2, and MW-3. A water supply well survey was also performed. Three wells were identified within a half mile radius of the site. None of these wells are down-gradient of the site. Details are presented in SES's *Subsurface Investigation* report, dated May, 13, 1991.

Monitoring Well Installation: In November 1995, Earth Technology installed an offsite, down-gradient groundwater monitoring well (ACMW-1) to 30.50 feet below grade (fbg) for additional plume delineation.

Used-oil UST Removal: In November 1997, Touchstone Developments Environmental Management removed a 1,000 gallon single-walled fiberglass used-oil UST. A soil sample collected from 8 fbg in the UST basin after tank removal contained 64 mg/kg oil and grease. No TPHg or benzene was reported. Unidentified hydrocarbons in the diesel range were reported at 5.5 mg/kg. Details are presented in Touchstone Developments *Used-Oil Tank Removal and Sampling Report*, dated November 20, 1997.

HYDROGEOLOGY/SOIL LITHOLOGY

Measured depth to water below the site has historically ranged between 2.39 and 7.99 fbg. Groundwater beneath the site typically flows south-southwest. The nearest surface water bodies are a tidal creek approximately 1,600 feet east of the site, and Richardson Bay approximately 4,200 feet east of the site.

The site is located in the Coast Range geomorphic province, comprised of sedimentary and metamorphic rocks with local exposures of rocks from the Franciscan complex. The site is underlain by artificial fill and bay mud.

INVESTIGATION RESULTS

The objective of this investigation was to further evaluate the down-gradient definition of the extent of diesel hydrocarbons and MTBE in soil and groundwater. To meet this objective, Cambria installed monitoring well MW-4 down-gradient of the USTs. The results of Cambria's March 8, 2005 subsurface investigation are summarized below. Analytical results of the soil are summarized in Table 1. Analytical results of groundwater are summarized in Table 2. The drilling permit is included in Attachment B. The boring logs are presented as Attachment C. The analytical reports of soil and groundwater samples for the investigation are presented as Attachment D. Cambria's Standard Field Procedures are presented as Attachment E.

Soil Borings

Permits: County of Marin Community Development Agency permit number MW 04/05 – 11(1) is included in Attachment B.

Drilling Dates: MW-4 was advanced on March 8, 2005.

Drilling Company: Gregg Drilling, Inc. of Martinez, CA (C-57 Lic. # 485165).

Sampling Personnel: Staff Scientist Kiersten Hoey conducted all fieldwork under the supervision of California Professional Geologist David W. Herzog (P.G. #7211).

Drilling Method: The first 8 feet of the boring was cleared using an air-knife/vacuum rig to ensure no subsurface utilities would be encountered. Below 8 feet, boring MW-4 was drilled to a total depth of 20 fbg. The boring was drilled using 8-inch hollow-stem augers.

Soil Sampling: Soil samples were collected every five feet, beginning at 5 fbg. The 5 fbg sample was collected by driving a 2-inch diameter brass tube into disturbed sediments. Samples between 10 and 20 fbg were collected by driving an 18-inch-long split-spoon sampler lined with 2-inch-diameter brass tubes into undisturbed sediments. Table 1 lists the soil analytical data.

Soil Screening: Soil samples were screened using a photo-ionization detector (PID). Samples were selected for analyses based on PID readings, evidence of discoloration, stratigraphic location, and depth to groundwater.

Encountered Lithology: Lithology encountered in the boring consisted of fill to approximately 4.5 fbg, underlain by silty clay to approximately 20 fbg (total depth explored).

Laboratory Analyses: Selected soil samples were analyzed by Lancaster Laboratories for:

- TPHg by N. CA LUFT Gasoline method;
- TPHd by CALUFT-DRO/8015B using silica gel clean-up; and
- Benzene, toluene, ethyl-benzene, xylenes (BTEX), MTBE, di-Isopropyl ether (DIPE), Ethyl tertiary butyl ether (ETBA), Tertiary amyl methyl ether (TAME), Tertiary butyl alcohol (TBA), 1,2-Dichloroethane (1,2-DCA), and 1,2-Dibromoethane (EDB) by EPA Method 8260B

Soil Disposal: Soil cuttings were stored in drums on-site, removed by Integrated Waste Management and transported to Republic Services Vasco Road Landfill in Livermore, California.

Well Construction

Well Materials: Well MW-4 was constructed with two-inch diameter, schedule 40 PVC pipe casing and 0.010-inch screen, Monterey Sand #2/16 filter pack, a 1-foot bentonite seal above the screen and sand pack and filled with neat Portland cement to grade.

Screened Interval: The screen interval for well MW-4 is 5 to 20 fbg.

Depth to Groundwater: Groundwater was encountered at approximately 6 fbg.

Well Development: Gettler-Ryan, Inc. developed well MW-4 on March 18, 2004 using surge-block agitation and bailer evacuation.

Groundwater Sampling: Groundwater samples were collected from well MW-4, and wells MW-1, MW-2, MW-2, and ACMW-1 on March 18, 2005 (Attachment D).

Groundwater Analyses: Groundwater samples was analyzed for:

- TPHg by N. CA LUFT Gasoline Method;
- TPHd by Modified CALUFT-DRO/8015B with silica gel cleanup; and
- BTEX, and fuel oxygenates: MTBE, TBA, DIPE, TAME, ETBE, and lead scavengers 1,2-DCA and EDB by EPA Method 8260B

Top-of-Casing Elevations: On March 29, 2005, Licensed Land Surveyor Morrow Surveying (#LS5161) surveyed the top-of-casing for wells MW-1 through MW-4 and ACMW-1. The well survey data are provided in Attachment F.

HYDROCARBONS IN SOIL

No TPHg, benzene, or ethylbenzene was reported in any sample. TPHd was only reported in the soil sample collected from 5 fbg at 17 mg/kg. Xylenes and toluene were also reported in the 5 fbg sample at 0.002 mg/kg each. No oxygenates or lead scavengers were detected, except 0.0009 mg/kg MTBE at 15 fbg was reported in the soil samples. The vertical extent of hydrocarbons in soil is defined in well MW-4. The lateral extent of TPHd and MTBE in down-gradient soil is essentially defined to concentrations just above the laboratory detection limits by MW-4. Analytical results for soil are presented in Table 1. The laboratory analytical report for soil is presented as Attachment D.

HYDROCARBONS IN GROUNDWATER

Monitoring well MW-4 was installed down-gradient of the source area. Groundwater samples were collected from all site wells and analyzed for TPHd, TPHg, BTEX, 1,2-DCA, EDB, ethanol, and five oxygenates. TPHd was reported in all wells. The highest concentration of TPHd was reported in MW-3 at 930 µg/L. TPHg and benzene were reported only in MW-2 at 670 µg/L and 1 µg/L, respectively. MTBE was reported in MW-2, MW-3, and MW-4 at 36 µg/L, 150 µg/L, and 1 µg/L, respectively. TAME and TBA were also reported in MW-2 and MW-3. TPHg and benzene appear limited to the groundwater beneath the source area and have not migrated off-site. MTBE appears essentially defined up-, cross-, and down-gradient of the source area. Analytical results for groundwater samples are presented in Table 2. The laboratory analytical report for groundwater is presented as Attachment D.

CONCLUSIONS AND RECOMMENDATIONS

The vertical extent of hydrocarbons in soil is defined by monitoring well MW-4. Lateral extent of TPHd and MTBE in down-gradient soil is essentially defined to concentrations just above the laboratory detection limits by MW-4. TPHg and benzene appear limited to the groundwater beneath the source area and have not migrated off-site. MTBE appears essentially defined in all directions. Continued groundwater monitoring is necessary to evaluate diesel range hydrocarbon

attenuation. Therefore, Cambria recommends continued monitoring and sampling of wells MW-1 through MW-4 and ACMW-1. Cambria will recommend case closure for this site if diesel concentrations continue to decrease. Destruction of wells MW-1 through MW-3 as proposed in Cambria's September 28, 2004 workplan has been postponed pending finalization of site redevelopment plans by ChevronTexaco.

CLOSING

Please contact Kiersten Hoey (ext. 105) at (916) 630-1855 with any questions or if you require additional information.

Sincerely,
Cambria Environmental Technology, Inc.

Kiersten Hoey
Staff Scientist

David W. Herzog P.G. #7211
Senior Project Geologist

Figures: 1 – Vicinity Map
2 – Site Plan

Tables: 1 – Soil Analytical Data
2 – Groundwater Analytical Data

Attachments: A – Regulatory Correspondence
B – Drilling Permit
C – Boring Log
D – Laboratory Analytic Reports
E – Standard Field Procedures for Borings and Wells.
F – Well Survey Data

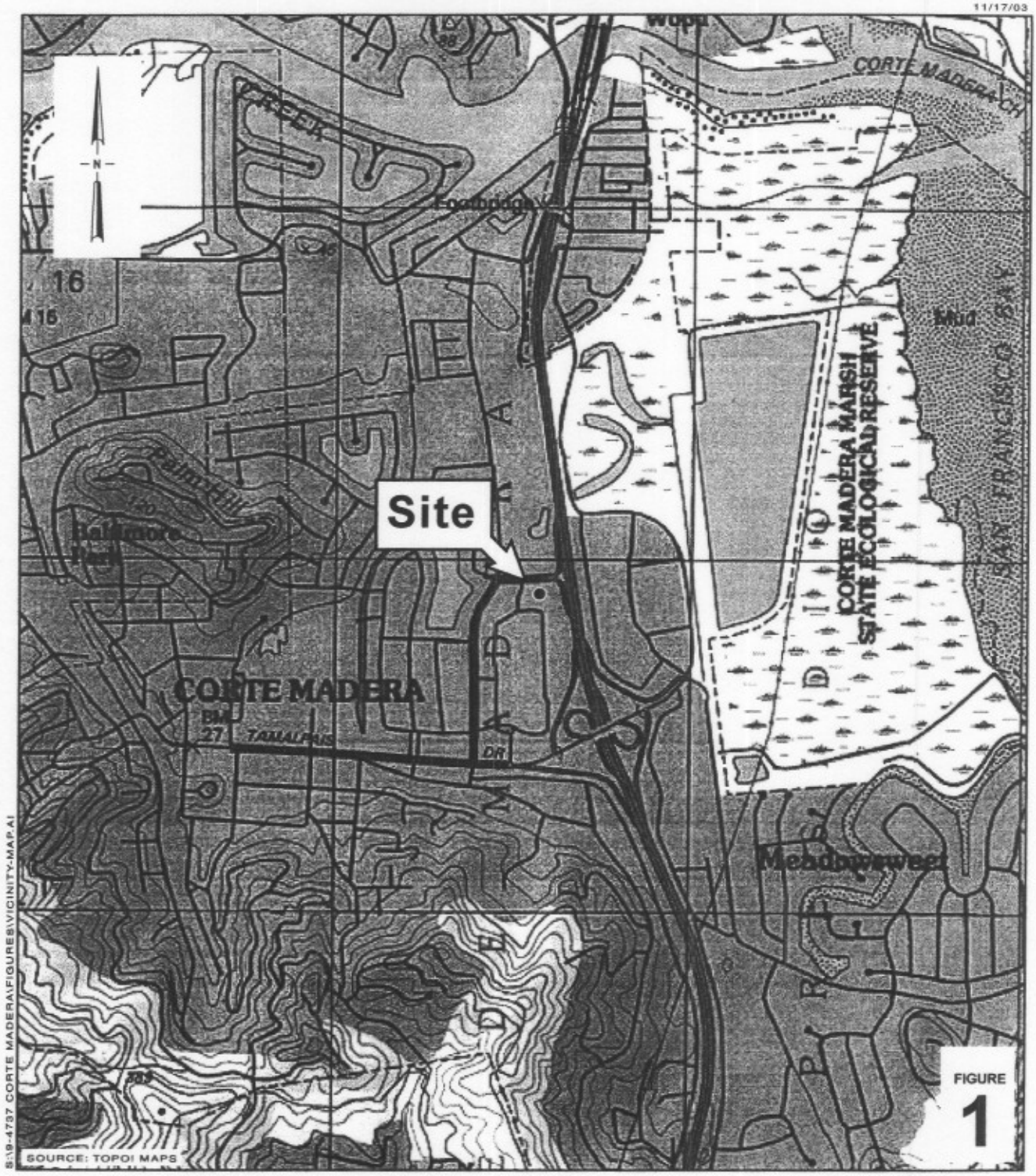
cc: Mr. Dana Thurman, Chevron Environmental Management Company, PO Box 6012, Room K2236 San Ramon, California 94583

Mr. Tomothy Underwood, Marin County Department of Public Works, Office of waste Management, P.O. Box 4186, San Rafael, CA 94913

Mr. Stan Hoffman, Madison-Marquette Managmenet Co., 100 Corte Madera Town Center, Corte Madera, CA 94925

Ms. Kathleen Burgi-Sandell, Lend-Lease, 1 Front St, Suite 1100, San Francisco, CA 94111.

Cambria Environmental Technology, Inc.



Chevron Service Station 9-4737

90 Madera Boulevard

Corte Madera, California

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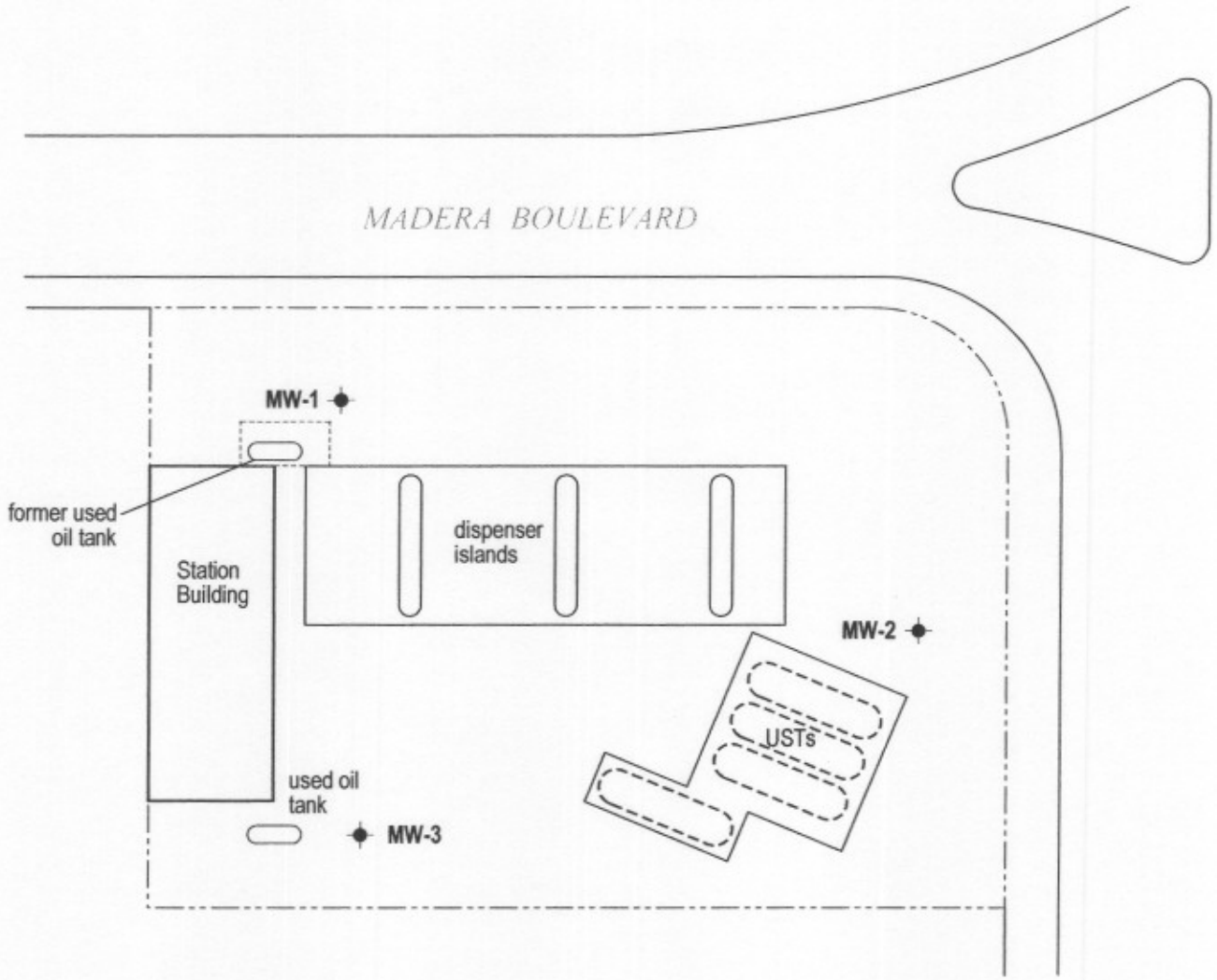
Vicinity Map

03/25/04



FIGURE

2

R:\9-4737 CORTE MADERA\DWG\SITEPLAN.DWG

Chevron Service Station 9-4737

90 Madera Boulevard

Corte Madera, California

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Site Plan

Table 1
Analytical Results for Soil
Chevron Station #9-4737, 90 Corte Madera Blvd, Corte Madera, CA

Sample ID	Depth (fbg)	Date	TPHd	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	DIPE	ETBE	TAME	TBA	1,2-DCA	EDB	Total Lead
							(Concentrations in mg/kg)									
MW-4	5	3/8/2005	**17***	<1.0	<0.0005	**0.002**	<0.001	**0.002**	<0.0005	<0.001	<0.001	<0.001	<0.020	<0.001	<0.001	-
	10	3/8/2005	<10*	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.020	<0.001	<0.001	-
	15	3/8/2005	<10*	<1.0	<0.0005	<0.001	<0.001	<0.001	**0.0009**	<0.001	<0.001	<0.001	<0.020	<0.001	<0.001	-
	20	3/8/2005	<10*	<1.0	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.020	<0.001	<0.001	-
SP		3/8/2005	<10	<1.0	<0.005	<0.005	<0.005	<0.02	<0.05	-	-	-	-	-	-	**5.37**

Abbreviations/Notes

TPHg = total petroeum hydrocarbons as gas
TPHd = total petroleum hydrocarbons as deisel
MTBE = methyl tertiary butyl ether
DIPE = di-isopropyl ether
ETBE = ethyl tertiary butyl ether
TAME = tertiary amyl methyl ether
TBA = tertiary butyl ether
1,2-DCA = 1,2-dichloroethane
EDB = 1,2-dibromoethane
<x.xx = not detected above laboratory detection limit
"-" = not analyzed
SP = Composite Sample

Table 2
Analytical Results for Groundwater
Chevron Station #9-4737, 90 Corte Madera Blvd, Corte Madera, CA

Sample ID	Date	TPHd	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	DIPE	ETBE	TAME	TBA	1,2-DCA	EDB	Ethanol
							(Concentrations in ug/L)								
MW-1	3/18/2005	**360***	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<0.5	<50
MW-2	3/18/2005	**410***	**670**	**1**	<0.5	**2**	**0.5**	**36**	<0.5	<0.5	**4**	**6**	<0.5	<0.5	<50
MW-3	3/18/2005	**930***	<50	<0.5	<0.5	<0.5	<0.5	**150**	<0.5	<0.5	**7**	**260**	<0.5	<0.5	<50
MW-4[1]	3/18/2005	**210***	<50	<0.5	**0.5**	<0.5	<0.5	**1**	<0.5	<0.5	<0.5	<5	<0.5	<0.5	<50
ACMW-1	3/18/2005	**100***	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<0.5	<50
QA	3/18/2005	-	<50	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	-

Abbreviations/Notes

TPHd = total petroleum hydrocarbons as diesel
TPHg = total petroeum hydrocarbons as gas
MTBE = methyl tertiary butyl ether
DIPE = di-Isopropyl ether
ETBE = ethyl tertiary butyl ether
TAME = tertiary amyl methyl ether
TBA = tertiary butyl ehter
1,2-DCA = 1,2-dichloroethane
EDB = 1,2-dibromoethane
<x.xx = not detected aobve the detection limit
"-" = not analyzed
ug/L = micrograms per liter
* = with silica gel cleanup
[1] = Sample submitted for volatile analysis did not have a pH<2, but a pH=7. Although the sample does not appear properly preserved, it was analyzed within seven days of collection, which is within the holding time of an unpreserved sa

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ATTACHMENT A

Regulatory Correspondence

California Regional Water Quality Control Board
San Francisco Bay Region

Dr. Alan Lloyd
Secretary for Environmental Protection

1515 Clay Street, Suite 1400, Oakland, California 94612
(510) 622-2300 • Fax (510) 622-2460
http://www.waterboards.ca.gov/sanfranciscobay

Arnold Schwarzenegger
Governor

Chevron Environmental Management Co.
Attn: Ms. Karen Streich
P. O. Box 6012
San Ramon, CA 94583

January 12, 2005
UST File No. 21-0034 (JMJ)

Dear Ms. Streich:

SUBJECT: Approval of *"Workplan for Monitoring Well Installation and Well Destruction"* dated September 28, 2004, and Requirement for a Technical Report for Chevron Station 9-4737, 90 Madera Blvd., Corte Madera, Marin County

Regional Board staff has reviewed the subject workplan dated September 28, 2004. This workplan proposes to destroy the three on-site monitoring wells during the second quarter of 2005 to facilitate site reconstruction. The reconstruction includes replacement of the USTs, dispenser islands, canopies, and convenience store. The workplan also propose to install one off-site downgradient monitoring well. You are hereby granted approval for the implementation of the workplan.

As the current owner and/or operator of the subject site, you are required to submit a technical report pursuant to Section 13267 of the California Water Code. **The required technical report is due in this office by April 10, 2005, and shall consist of a report documenting the installation of the monitoring well proposed in the September 28, 2004, workplan.** Failure to respond or a late response to this request may subject you to civil liability imposed by the Water Board to a maximum amount of $1000 per day. Any extensions of the time deadlines set forth above must be confirmed in writing by Board staff.

Please include the Regional Board file number shown in the heading of this letter. All workplans, reports, and correspondence must be submitted to this Water Board with a copy sent to Mr. Tim Underwood of the Marin County of Waste Management.

Please direct all questions and correspondence regarding this matter to John Jang of my staff at (510) 622-2366 (email address jjang@waterboards.ca.gov).

Post-it® Fax Note 7671	Date 1/26/05	# of pages ▶ 1
To David Herzog	From John Jang	
Co./Dept. Cambria	Co. RWQCB #L	
Phone #	Phone # 510-622-2366	
Fax # 916-638-1856	Fax #	

Sincerely,

Bruce H. Wolfe
Executive Officer

CAMBRIA

ATTACHMENT B

Drilling Permit

COUNTY OF MARIN
COMMUNITY DEVELOPMENT AGENCY

RECEIVED
FEB 07 2005
By

PERMIT TO INSTALL MONITORING WELLS

Environmental Health Services
3501 Civic Center Drive, Rm 236
San Rafael, CA 94903
(415) 499-6907
FAX (415) 507-4120

Date of Issuance: February 2, 2005
Date of Expiration: February 2, 2006

To: Chevron Environmental Management
PO Box 6012
San Ramon, CA 94583

Permit No.: MW 04/05 – 11 (1)

Street Address: 90 Corte Madera Town Center

City: Corte Madera

Assessor's Parcel No: 024-163-01

Driller: Gregg Drilling, Inc. 950 Howe Road, Martinez, CA 94553

Permission is hereby granted to construct one (1) monitoring well(s) at the above, indicated site.

In order to provide the necessary inspections, the well driller shall notify this office *at (415) 499-6907* at least **two working days** in advance of drilling the well. Also, contact Environmental Health on the day of the work. The annular seal shall not be placed until approval from Environmental Health Service is granted.

CONDITIONS:

1. This permit is not valid in the Coastal Zones until a Coastal permit is first obtained.
2. This permit is not valid until local encroachment permits are first obtained. Please contact appropriate city, park or special district agencies for more information.
3. **Install sanitary seals with a minimum depth of five feet.**

Well construction shall meet the requirements of the current State of California Well Standards Bulletin 74-90 (as revised) and the CCR Title 26. The well driller shall submit a Department of Water Resources Form 188 (Water Well Drillers Report) within 30 days of project completion.

Marin County Office of Waste Management must be notified prior to drilling well.

Issued by,

Scott Callow, Senior R.E.H.S.

c: Cambria Env. Tech, 4111 Citrus Ave #12, Rocklin, CA 95677
Marin County Waste Management
Town of Corte Madera

OFFICE USE ONLY

1. _____

2. _____

3. _____

CAMBRIA

ATTACHMENT C

Boring Log

Cambria Environmental Technology, Inc.
2680 Bishop Drive, Suite 290
San Ramon, CA 94583
Telephone: (925) 275-3200
Fax: (925) 275-3204

BORING/WELL LOG

CLIENT NAME	Chevron Products Company	**BORING/WELL NAME**	MW-4
JOB/SITE NAME	9-4737	**DRILLING STARTED**	08-Mar-05
LOCATION	90 Corte Madera Town Center	**DRILLING COMPLETED**	08-Mar-05
PROJECT NUMBER	61H-1669	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	Gregg Drilling	**GROUND SURFACE ELEVATION**	
DRILLING METHOD	Hollow-stem auger	**TOP OF CASING ELEVATION**	NA
BORING DIAMETER	8-inches	**SCREENED INTERVAL**	5 to 20 ft bgs
LOGGED BY	K. Hoey	**DEPTH TO WATER (First Encountered)**	5.5 ft (08-Mar-05)
REVIEWED BY	D. Herzog P.G. #7211	**DEPTH TO WATER (Static)**	6.3 ft (18-Mar-05)
REMARKS	Boring cleared to 8 fbg with air knife and hand auger		

PID (ppm)	TPHg (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (ft bgs)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (ft bgs)	WELL DIAGRAM
								Asphalt	0.5	Portland Type I/II
								Fill:		2" diam., Schedule 40 PVC
										Bentonite Seal
0			MW-4@5		5	OH		**Silty CLAY with Gravel:** Soft; Blackish Grey with green gravel; moist; 70% clay, 20% silt, 10% gravel; moderate to high plasticity; moderate to low estimated permeability.	4.5	
									8.0	
0			MW-4@10		10			**Silty CLAY:** Soft; Dark Grey; wet; 60% clay, 40% silt; moderate plasticity; low estimated permeability.		
						OL				Monterey Sand #2/16 2"-diam., 0.010" Slotted Schedule 40 PVC
0			MW-4@15		15					
0			MW-4@20		20				20.0	Bottom of Boring @ 20 ft

WELL LOG (PID/TPHG) R:\9-4737~1\MARCH2~1.GPJ DEFAULT.GDT 4/6/05

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ATTACHMENT D

Laboratory Analytic Reports

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

ANALYTICAL RESULTS

Prepared for:

ChevronTexaco C/O Cambria
4111 Citrus Avenue
Suite 9
Rocklin CA 95677
916-630-1855

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

SAMPLE GROUP

The sample group for this submittal is 934860. Samples arrived at the laboratory on Thursday, March 10, 2005. The PO# for this group is 99011184 and the release number is THURMAN.

Client Description			Lancaster Labs Number
MW-4-S-5-050308	Grab	Soil	4479187
MW-4-S-10-050308	Grab	Soil	4479188
MW-4-S-15-050308	Grab	Soil	4479189
MW-4-S-20-050308	Grab	Soil	4479190

1 COPY TO Cambria Environmental Attn: Jami Shaffer

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Questions? Contact your Client Services Representative
Angela M Miller at (717) 656-2300.

Respectfully Submitted,

Robin C. Runkle
Senior Chemist

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Lancaster Laboratories Sample No. SW 4479187

MW-4-S-5-050308 Grab Soil
Facility# 94737 MTI# 61H-1669 CETR
90 Corte Madera-Corte Mad T0604100033 MW-4
Collected:03/08/2005 12:30 by KH

Account Number: 10880

Submitted: 03/10/2005 09:10
Reported: 03/18/2005 at 12:27
Discard: 04/18/2005

ChevronTexaco C/O Cambria
4111 Citrus Avenue
Suite 9
Rocklin CA 95677

CMC05

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01725	TPH-GRO - Soils	n.a.	N.D.	1.0	mg/kg	25
	The analysis for volatiles was performed on a sample which was preserved in methanol. The reporting limits were adjusted appropriately. The reported concentration of TPH-GRO does not include MTBE or other gasoline constituents eluting prior to the C6 (n-hexane) TPH-GRO range start time.					
02201	TPH-DRO CALUFT(Soils) w/Si Gel	n.a.	17.	10.	mg/kg	1
07361	BTEX+5 Oxygenates+EDC+EDB					
02016	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	mg/kg	1
02017	di-Isopropyl ether	108-20-3	N.D.	0.001	mg/kg	1
02018	Ethyl t-butyl ether	637-92-3	N.D.	0.001	mg/kg	1
02019	t-Amyl methyl ether	994-05-8	N.D.	0.001	mg/kg	1
02020	t-Butyl alcohol	75-65-0	N.D.	0.020	mg/kg	1
05460	Benzene	71-43-2	N.D.	0.0005	mg/kg	1
05461	1,2-Dichloroethane	107-06-2	N.D.	0.001	mg/kg	1
05466	Toluene	108-88-3	0.002	0.001	mg/kg	1
05471	1,2-Dibromoethane	106-93-4	N.D.	0.001	mg/kg	1
05474	Ethylbenzene	100-41-4	N.D.	0.001	mg/kg	1
06301	Xylene (Total)	1330-20-7	0.002	0.001	mg/kg	1

State of California Lab Certification No. 2116

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
01725	TPH-GRO - Soils	N. CA LUFT Gasoline method	1	03/14/2005 15:43	Martha L Seidel	25
02201	TPH-DRO CALUFT(Soils) w/Si Gel	CALUFT-DRO/8015B, Modified	1	03/16/2005 20:05	Sarah M Snyder	1
07361	BTEX+5 Oxygenates+EDC+EDB	SW-846 8260B	1	03/14/2005 05:37	Anastasia Papadoplos	1
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	1	03/14/2005 02:14	Anastasia Papadoplos	n.a.
01150	GC - Bulk Soil Prep	SW-846 5035	1	03/11/2005 15:56	Eric L Vera	n.a.
07024	DRO Alternate Soil Extraction	TPH by CA LUFT	1	03/15/2005 14:45	Jason A Heisey	1

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Analysis Report

Lancaster Laboratories Sample No. SW 4479188

MW-4-S-10-050308 Grab Soil
Facility# 94737 MTI# 61H-1669 CETR
90 Corte Madera-Corte Mad T0604100033 MW-4
Collected:03/08/2005 13:03 by KH

Account Number: 10880

Submitted: 03/10/2005 09:10
Reported: 03/18/2005 at 12:27
Discard: 04/18/2005

ChevronTexaco C/O Cambria
4111 Citrus Avenue
Suite 9
Rocklin CA 95677

CMC10

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01725	TPH-GRO - Soils	n.a.	N.D.	1.0	mg/kg	25
	The analysis for volatiles was performed on a sample which was preserved in methanol. The reporting limits were adjusted appropriately. The reported concentration of TPH-GRO does not include MTBE or other gasoline constituents eluting prior to the C6 (n-hexane) TPH-GRO range start time. A poor surrogate recovery was observed. The analysis was repeated and a poor surrogate recovery was again observed indicating a significant matrix effect.					
02201	TPH-DRO CALUFT(Soils) w/Si Gel	n.a.	N.D.	10.	mg/kg	1
07361	BTEX+5 Oxygenates+EDC+EDB					
02016	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	mg/kg	1.01
02017	di-Isopropyl ether	108-20-3	N.D.	0.001	mg/kg	1.01
02018	Ethyl t-butyl ether	637-92-3	N.D.	0.001	mg/kg	1.01
02019	t-Amyl methyl ether	994-05-8	N.D.	0.001	mg/kg	1.01
02020	t-Butyl alcohol	75-65-0	N.D.	0.020	mg/kg	1.01
05460	Benzene	71-43-2	N.D.	0.0005	mg/kg	1.01
05461	1,2-Dichloroethane	107-06-2	N.D.	0.001	mg/kg	1.01
05466	Toluene	108-88-3	N.D.	0.001	mg/kg	1.01
05471	1,2-Dibromoethane	106-93-4	N.D.	0.001	mg/kg	1.01
05474	Ethylbenzene	100-41-4	N.D.	0.001	mg/kg	1.01
06301	Xylene (Total)	1330-20-7	N.D.	0.001	mg/kg	1.01

State of California Lab Certification No. 2116

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
01725	TPH-GRO - Soils	N. CA LUFT Gasoline method	1	03/14/2005 16:29	Martha L Seidel	25
02201	TPH-DRO CALUFT(Soils) w/Si Gel	CALUFT-DRO/8015B, Modified	1	03/16/2005 13:21	Sarah M Snyder	1
07361	BTEX+5 Oxygenates+EDC+EDB	SW-846 8260B	1	03/14/2005 05:59	Anastasia Papadoplos	1.01
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	1	03/14/2005 02:16	Anastasia Papadoplos	n.a.
01150	GC - Bulk Soil Prep	SW-846 5035	1	03/11/2005 16:00	Eric L Vera	n.a.
07024	DRO Alternate Soil Extraction	TPH by CA LUFT	1	03/15/2005 14:45	Jason A Heisey	1

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Analysis Report

Lancaster Laboratories Sample No. SW 4479189

MW-4-S-15-050308 Grab Soil
Facility# 94737 MTI# 61H-1669 CETR
90 Corte Madera-Corte Mad T0604100033 MW-4
Collected:03/08/2005 13:10 by KH

Account Number: 10880

Submitted: 03/10/2005 09:10
Reported: 03/18/2005 at 12:28
Discard: 04/18/2005

ChevronTexaco C/O Cambria
4111 Citrus Avenue
Suite 9
Rocklin CA 95677

CMC15

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01725	TPH-GRO - Soils	n.a.	N.D.	1.0	mg/kg	25
	The analysis for volatiles was performed on a sample which was preserved in methanol. The reporting limits were adjusted appropriately. The reported concentration of TPH-GRO does not include MTBE or other gasoline constituents eluting prior to the C6 (n-hexane) TPH-GRO range start time.					
02201	TPH-DRO CALUFT(Soils) w/Si Gel	n.a.	N.D.	10.	mg/kg	1
07361	BTEX+5 Oxygenates+EDC+EDB					
02016	Methyl Tertiary Butyl Ether	1634-04-4	0.0009	0.0005	mg/kg	1
02017	di-Isopropyl ether	108-20-3	N.D.	0.001	mg/kg	1
02018	Ethyl t-butyl ether	637-92-3	N.D.	0.001	mg/kg	1
02019	t-Amyl methyl ether	994-05-8	N.D.	0.001	mg/kg	1
02020	t-Butyl alcohol	75-65-0	N.D.	0.020	mg/kg	1
05460	Benzene	71-43-2	N.D.	0.0005	mg/kg	1
05461	1,2-Dichloroethane	107-06-2	N.D.	0.001	mg/kg	1
05466	Toluene	108-88-3	N.D.	0.001	mg/kg	1
05471	1,2-Dibromoethane	106-93-4	N.D.	0.001	mg/kg	1
05474	Ethylbenzene	100-41-4	N.D.	0.001	mg/kg	1
06301	Xylene (Total)	1330-20-7	N.D.	0.001	mg/kg	1

State of California Lab Certification No. 2116

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
01725	TPH-GRO - Soils	N. CA LUFT Gasoline method	1	03/14/2005 17:15	Martha L Seidel	25
02201	TPH-DRO CALUFT(Soils) w/Si Gel	CALUFT-DRO/8015B, Modified	1	03/16/2005 13:44	Sarah M Snyder	1
07361	BTEX+5 Oxygenates+EDC+EDB	SW-846 8260B	1	03/14/2005 08:38	Anastasia Papadoplos	1
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	1	03/14/2005 02:18	Anastasia Papadoplos	n.a.
01150	GC - Bulk Soil Prep	SW-846 5035	1	03/11/2005 16:07	Eric L Vera	n.a.
07024	DRO Alternate Soil Extraction	TPH by CA LUFT	1	03/15/2005 14:45	Jason A Heisey	1

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Analysis Report

Lancaster Laboratories Sample No. SW 4479190

MW-4-S-20-050308 Grab Soil
Facility# 94737 MTI# 61H-1669 CETR
90 Corte Madera-Corte Mad T0604100033 MW-4
Collected:03/08/2005 13:13 by KH

Account Number: 10880

Submitted: 03/10/2005 09:10
Reported: 03/18/2005 at 12:28
Discard: 04/18/2005

ChevronTexaco C/O Cambria
4111 Citrus Avenue
Suite 9
Rocklin CA 95677

CMC20

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01725	TPH-GRO - Soils	n.a.	N.D.	1.0	mg/kg	25
	The analysis for volatiles was performed on a sample which was preserved in methanol. The reporting limits were adjusted appropriately. The reported concentration of TPH-GRO does not include MTBE or other gasoline constituents eluting prior to the C6 (n-hexane) TPH-GRO range start time.					
02201	TPH-DRO CALUFT(Soils) w/Si Gel	n.a.	N.D.	10.	mg/kg	1
07361	BTEX+5 Oxygenates+EDC+EDB					
02016	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	mg/kg	1
02017	di-Isopropyl ether	108-20-3	N.D.	0.001	mg/kg	1
02018	Ethyl t-butyl ether	637-92-3	N.D.	0.001	mg/kg	1
02019	t-Amyl methyl ether	994-05-8	N.D.	0.001	mg/kg	1
02020	t-Butyl alcohol	75-65-0	N.D.	0.020	mg/kg	1
05460	Benzene	71-43-2	N.D.	0.0005	mg/kg	1
05461	1,2-Dichloroethane	107-06-2	N.D.	0.001	mg/kg	1
05466	Toluene	108-88-3	N.D.	0.001	mg/kg	1
05471	1,2-Dibromoethane	106-93-4	N.D.	0.001	mg/kg	1
05474	Ethylbenzene	100-41-4	N.D.	0.001	mg/kg	1
06301	Xylene (Total)	1330-20-7	N.D.	0.001	mg/kg	1

State of California Lab Certification No. 2116

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
01725	TPH-GRO - Soils	N. CA LUFT Gasoline method	1	03/14/2005 18:01	Martha L Seidel	25
02201	TPH-DRO CALUFT(Soils) w/Si Gel	CALUFT-DRO/8015B, Modified	1	03/16/2005 14:06	Sarah M Snyder	1
07361	BTEX+5 Oxygenates+EDC+EDB	SW-846 8260B	1	03/14/2005 09:00	Anastasia Papadoplos	1
00374	GC/MS - Bulk Sample Prep	SW-846 5030A	1	03/14/2005 02:20	Anastasia Papadoplos	n.a.
01150	GC - Bulk Soil Prep	SW-846 5035	1	03/11/2005 16:14	Eric L Vera	n.a.
07024	DRO Alternate Soil Extraction	TPH by CA LUFT	1	03/15/2005 14:45	Jason A Heisey	1

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Analysis Report

Quality Control Summary

Client Name: ChevronTexaco C/O Cambria
Reported: 03/18/05 at 12:28 PM

Group Number: 934860

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 05071A02B	Sample number(s): 4479187-4479190							
TPH-GRO - Soils	N.D.	1.0	mg/kg	77		67-119		
Batch number: 050740007A	Sample number(s): 4479187-4479190							
TPH-DRO CALUFT(Soils) w/Si Gel	N.D.	10.	mg/kg	97		61-130		
Batch number: A050691AB	Sample number(s): 4479187-4479190							
Methyl Tertiary Butyl Ether	N.D.	0.5	ug/kg	97		75-125		
di-Isopropyl ether	N.D.	1.	ug/kg	93		70-129		
Ethyl t-butyl ether	N.D.	1.	ug/kg	91		71-124		
t-Amyl methyl ether	N.D.	1.	ug/kg	93		63-129		
t-Butyl alcohol	N.D.	20.	ug/kg	97		51-160		
Benzene	N.D.	0.5	ug/kg	102		77-119		
1,2-Dichloroethane	N.D.	1.	ug/kg	101		76-126		
Toluene	N.D.	1.	ug/kg	104		81-116		
1,2-Dibromoethane	N.D.	1.	ug/kg	103		77-114		
Ethylbenzene	N.D.	1.	ug/kg	104		82-115		
Xylene (Total)	N.D.	1.	ug/kg	106		82-117		

Sample Matrix Quality Control

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 05071A02B	Sample number(s): 4479187-4479190								
TPH-GRO - Soils	65	62	39-118	4	30				
Batch number: 050740007A	Sample number(s): 4479187-4479190								
TPH-DRO CALUFT(Soils) w/Si Gel	89	86	33-140	4	20				
Batch number: A050691AB	Sample number(s): 4479187-4479190								
Methyl Tertiary Butyl Ether	90	88	49-140	3	30				
di-Isopropyl ether	94	91	63-129	3	30				
Ethyl t-butyl ether	88	87	65-123	2	30				
t-Amyl methyl ether	90	87	58-126	4	30				
t-Butyl alcohol	94	87	46-148	7	30				
Benzene	103	97	67-123	6	30				
1,2-Dichloroethane	97	93	62-130	4	30				
Toluene	105	101	55-125	5	30				
1,2-Dibromoethane	97	94	62-116	4	30				
Ethylbenzene	104	98	50-127	6	30				
Xylene (Total)	106	99	54-123	7	30				

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The background result was more than four times the spike added.

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Analysis Report

Quality Control Summary

Client Name: ChevronTexaco C/O Cambria Group Number: 934860
Reported: 03/18/05 at 12:28 PM

Sample Matrix Quality Control

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max

Surrogate Quality Control

Analysis Name: TPH-GRO - Soils
Batch number: 05071A02B

	Trifluorotoluene-F
4479187	64
4479188	59*
4479189	61
4479190	61
Blank	92
LCS	90
MS	70
MSD	71
Limits:	61-122

Analysis Name: TPH-DRO CALUFT(Soils) w/Si Gel
Batch number: 050740007A

	Orthoterphenyl
4479187	79
4479188	80
4479189	101
4479190	86
Blank	94
LCS	96
MS	92
MSD	92
Limits:	35-136

Analysis Name: BTEX+5 Oxygenates+EDC+EDB
Batch number: A050691AB

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
4479187	102	96	112	85
4479188	102	97	111	84
4479189	103	101	110	86
4479190	105	109	106	90
Blank	104	102	107	89
LCS	102	99	110	92
MS	103	98	111	92
MSD	103	98	110	92
Limits:	70-129	70-121	70-130	70-128

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The background result was more than four times the spike added.

Chevron California Region Analysis Request/Chain of Custody

Lancaster Laboratories
Where quality is a science.

For Lancaster Laboratories use only
Acct. #: 10860 Sample #: 4479187-90 SCR#: 934860

MTI 6LH-1669

Facility #: Chevron 9-4737
Site Address: 90 Corte Madera Town Center, Corte Madera
Chevron PM: D. Thurman Lead Consultant: Cambria
Consultant/Office: Rocklin
Consultant Prj. Mgr.: B. Eppler
Consultant Phone #: 916 630-1855 Fax #: 916 630-1856
Sampler: K. Hoey
Service Order #: ☐ Non SAR:

Analyses Requested

Preservation Codes

Field Point Name	Matrix	Repeat Sample	Top Depth	Year Month Day	Time Collected	New Field Pt.	Grab	Composite	Total Number of Containers	BTEX + MTBE 8260 ☒ 8021 ☐	TPH 8015 MOD GRO	TPH 8015 MOD DRO ☒ Silica Gel Cleanup	8260 full scan	Oxygenates ☒	Lead 7420 ☐ 7421 ☐
MW-4@5	SOIL		5	05/03/08	1230	X	X		1	X	X	X		X	
MW-4@10	↓			↓	1303	X	X		1	X	X	X		X	
MW-4@15					1310	X	X		1	X	X	X		X	
MW-4@20					1313	X	X		1	X	X	X		X	

Preservative Codes
H = HCl T = Thiosulfate
N = HNO_3 B = NaOH
S = H_2SO_4 O = Other

☐ J value reporting needed
☐ Must meet lowest detection limits possible for 8260 compounds

8021 MTBE Confirmation
☐ Confirm highest hit by 8260
☐ Confirm all hits by 8260
☐ Run ____ oxy's on highest hit
☐ Run ____ oxy's on all hits

Comments / Remarks
TPHg, TPHd, BTEX, MTBE, TAME, DIPE, TBA, ETBE, 1,2-DCA, EDB

Turnaround Time Requested (TAT) (please circle)
(STD. TAT) 72 hour 48 hour
24 hour 4 day 5 day

Data Package Options (please circle if required)
QC Summary Type I – Full
Type VI (Raw Data) ☐ Coelt Deliverable not needed
WIP (RWQCB)
Disk

	Date	Time		Date	Time
Relinquished by:			Received by:		
Relinquished by:			Received by:		
Relinquished by:			Received by:		
Relinquished by Commercial Carrier: UPS (FedEx) Other			Received by: Tammy Hutton	3/10/05	0910
Temperature Upon Receipt 2.7 C°			Custody Seals Intact? (Yes) No		

Lancaster Laboratories
2425 New Holland Pike • Lancaster, PA 17601

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

N.D.	none detected	**BMQL**	Below Minimum Quantitation Level
TNTC	Too Numerous To Count	**MPN**	Most Probable Number
IU	International Units	**CP Units**	cobalt-chloroplatinate units
umhos/cm	micromhos/cm	**NTU**	nephelometric turbidity units
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
ug	microgram(s)	**mg**	milligram(s)
ml	milliliter(s)	**l**	liter(s)
m3	cubic meter(s)	**ul**	microliter(s)

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

J estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike sample not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*****	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results for methods listed on the laboratories' accreditation scope meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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Lancaster Laboratories

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Analysis Report

ANALYTICAL RESULTS

Prepared for:

ChevronTexaco C/O Cambria
4111 Citrus Avenue
Suite 9
Rocklin CA 95677
916-630-1855

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

SAMPLE GROUP

The sample group for this submittal is 934862. Samples arrived at the laboratory on Thursday, March 10, 2005. The PO# for this group is 99011184 and the release number is THURMAN.

Client Description		Lancaster Labs Number
SP-S-050308	Composite Soil	4479193

1 COPY TO	Cambria Environmental	Attn: Jami Shaffer
1 COPY TO	IWM, Inc.	Attn: Jay DeLeon

Questions? Contact your Client Services Representative
Angela M Miller at (717) 656-2300.

Respectfully Submitted,

Dana M Kauffman

Dana M. Kauffman
Group Leader

Lancaster Laboratories

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Analysis Report

Lancaster Laboratories Sample No. SW 4479193

SP-S-050308 Composite Soil
Facility# 94737 MTI# 61H-1669 CETR
90 Corte Madera-Corte Mad T0604100033 SP
Collected:03/08/2005 14:00 by KH

Account Number: 10880

Submitted: 03/10/2005 09:10
Reported: 03/16/2005 at 16:45
Discard: 04/16/2005

ChevronTexaco C/O Cambria
4111 Citrus Avenue
Suite 9
Rocklin CA 95677

473SP

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
05547	TPH - DRO CA LUFT (Soils)	n.a.	N.D.	10.	mg/kg	1
06955	Lead	7439-92-1	5.37	0.921	mg/kg	1
01726	TPH-GRO - Soils					
01727	TPH-GRO - Soils	n.a.	N.D.	1.0	mg/kg	25

The analysis for volatiles was performed on a sample which was preserved in methanol. The reporting limits were adjusted appropriately.
The reported concentration of TPH-GRO does not include MTBE or other gasoline constituents eluting prior to the C6 (n-hexane) TPH-GRO range start time.
A poor surrogate recovery was observed. The analysis was repeated and a poor surrogate recovery was again observed indicating a significant matrix effect.

02160	BTEX/MTBE					
02174	Benzene	71-43-2	N.D.	0.005	mg/kg	25
02177	Toluene	108-88-3	N.D.	0.005	mg/kg	25
02178	Ethylbenzene	100-41-4	N.D.	0.005	mg/kg	25
02182	Total Xylenes	1330-20-7	N.D.	0.02	mg/kg	25
02199	MTBE	1634-04-4	N.D.	0.05	mg/kg	25

The analysis for volatiles was performed on a sample which was preserved in methanol. The reporting limits were adjusted appropriately.

State of California Lab Certification No. 2116

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
05547	TPH - DRO CA LUFT (Soils)	CALUFT-DRO/8015B, Modified	1	03/16/2005 09:00	Sarah M Snyder	1
06955	Lead	SW-846 6010B	1	03/14/2005 06:59	Joanne M Gates	1
01726	TPH-GRO - Soils	N. CA LUFT Gasoline Method	1	03/16/2005 00:15	Corie L Hilyer	25
02160	BTEX/MTBE	SW-846 8021B	1	03/16/2005 00:15	Corie L Hilyer	25
01150	GC - Bulk Soil Prep	SW-846 5035	1	03/11/2005 16:50	Eric L Vera	n.a.
05708	SW SW846 ICP Digest	SW-846 3050B	1	03/13/2005 20:00	Annamaria Stipkovits	1
07024	DRO Alternate Soil Extraction	TPH by CA LUFT	1	03/15/2005 14:45	Jason A Heisey	1

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Analysis Report

Lancaster Laboratories Sample No. SW 4479193

SP-S-050308 Composite Soil
Facility# 94737 MTI# 61H-1669 CETR
90 Corte Madera-Corte Mad T0604100033 SP
Collected:03/08/2005 14:00 by KH

Account Number: 10880

Submitted: 03/10/2005 09:10
Reported: 03/16/2005 at 16:45
Discard: 04/16/2005

ChevronTexaco C/O Cambria
4111 Citrus Avenue
Suite 9
Rocklin CA 95677

473SP

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Analysis Report

Quality Control Summary

Client Name: ChevronTexaco C/O Cambria
Reported: 03/16/05 at 04:45 PM

Group Number: 934862

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 050725708001	Sample number(s): 4479193							
Lead	N.D.	0.930	mg/kg	98		86-109		
Batch number: 050740007A	Sample number(s): 4479193							
TPH - DRO CA LUFT (Soils)	N.D.	10.	mg/kg	97		61-130		
Batch number: 05074A34A	Sample number(s): 4479193							
TPH-GRO - Soils	N.D.	1.0	mg/kg	93		67-119		
Benzene	N.D.	0.005	mg/kg	94		85-115		
Toluene	N.D.	0.005	mg/kg	90		81-119		
Ethylbenzene	N.D.	0.005	mg/kg	91		85-115		
Total Xylenes	N.D.	0.02	mg/kg	94		85-115		
MTBE	N.D.	0.05	mg/kg	95		71-118		

Sample Matrix Quality Control

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 050725708001	Sample number(s): 4479193								
Lead	96	96	75-125	1	20	4.49	4.51	1 (1)	20
Batch number: 050740007A	Sample number(s): 4479193								
TPH - DRO CA LUFT (Soils)	89	86	33-140	4	20				
Batch number: 05074A34A	Sample number(s): 4479193								
TPH-GRO - Soils	115	115	39-118	0	30				
Benzene	98	95	52-135	2	30				
Toluene	95	91	59-129	5	30				
Ethylbenzene	96	94	56-132	2	30				
Total Xylenes	102	99	54-134	2	30				
MTBE	107	104	45-141	3	30				

Surrogate Quality Control

Analysis Name: TPH - DRO CA LUFT (Soils)
Batch number: 050740007A
Orthoterphenyl

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The background result was more than four times the spike added.

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Analysis Report

Quality Control Summary

Client Name: ChevronTexaco C/O Cambria Group Number: 934862
Reported: 03/16/05 at 04:45 PM

Surrogate Quality Control

4479193	83
Blank	94
LCS	96
MS	92
MSD	92
Limits:	35-136

Analysis Name: BTEX/MTBE
Batch number: 05074A34A

	Trifluorotoluene-F	Trifluorotoluene-P
4479193	59*	63
Blank	101	104
LCS	108	108
MS	84	85
MSD	87	83
Limits:	61-122	63-126

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The background result was more than four times the spike added.

Chevron California Region Analysis Request/Chain of Custody

Lancaster Laboratories
Where quality is a science.

For Lancaster Laboratories use only
Acct. #: 10880 Sample #: 4479193-94 SCR#: 934862

MTI GIH-11669

Facility #: Chevron 9-4737
Site Address: 90 Corte Madera Town Center, Corte Madera
Chevron PM: D. Thurman Lead Consultant: Cambria
Consultant/Office: Rocklin
Consultant Prj. Mgr.: B. Eppler
Consultant Phone #: 916 630 7855 Fax #: 916 630 7856
Sampler: K. Hoey
Service Order #: ☐ Non SAR:

Analyses Requested

Preservation Codes

Preservative Codes
H = HCl T = Thiosulfate
N = HNO_3 B = NaOH
S = H_2SO_4 O = Other

☐ J value reporting needed
☐ Must meet lowest detection limits possible for 8260 compounds

8021 MTBE Confirmation
☐ Confirm highest hit by 8260
☐ Confirm all hits by 8260
☐ Run ____ oxy's on highest hit
☐ Run ____ oxy's on all hits

Field Point Name	Matrix	Repeat Sample	Top Depth	Year Month Day	Time Collected	New Field Pt.	Grab	Composite	Total Number of Containers	BTEX + MTBE 8260 ☐ 8021	TPH 8015 MOD GRO	TPH 8015 MOD DRO ☐ Silica Gel Cleanup	8260 full scan	___ Oxygenates	Lead 7420 ☐ 7421 ☐	Total Lead
COMP	SOIL			2005/03/08	1400	X		X	3	X	X	X				X
Sample ID SP per B. Eppler AM 3/14/05																

Comments / Remarks
TPHg, TPHd, BTEX, MTBE, Total Lead.

Turnaround Time Requested (TAT) (please circle)
STD. TAT 24 hour | 72 hour 4 day | 96 hour 5 day → per B. Eppler AM 3/14/05

Data Package Options (please circle if required)
QC Summary
Type VI (Raw Data)
WIP (RWQCB)
Disk
Type I – Full
☐ Coelt Deliverable not needed

	Date	Time		Date	Time
Relinquished by: Kristen Hoey	3/9/05	11:30	Received by:		
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by Commercial Carrier: UPS FedEx Other			Received by: Tammy Hunter	3/10/05	0910
Temperature Upon Receipt ____ C°			Custody Seals Intact? Yes No		

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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

N.D.	none detected	**BMQL**	Below Minimum Quantitation Level
TNTC	Too Numerous To Count	**MPN**	Most Probable Number
IU	International Units	**CP Units**	cobalt-chloroplatinate units
umhos/cm	micromhos/cm	**NTU**	nephelometric turbidity units
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
ug	microgram(s)	**mg**	milligram(s)
ml	milliliter(s)	**l**	liter(s)
m3	cubic meter(s)	**ul**	microliter(s)

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

J estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike sample not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*****	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results for methods listed on the laboratories' accreditation scope meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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Analysis Report

ANALYTICAL RESULTS

Prepared for:

ChevronTexaco c/o Cambria
Suite 9
4111 Citrus Avenue
Rocklin CA 95677
916-630-1855

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

SAMPLE GROUP

The sample group for this submittal is 936086. Samples arrived at the laboratory on Saturday, March 19, 2005. The PO# for this group is 99011184 and the release number is MTI.

Client Description			Lancaster Labs Number
QA-T-050318	NA	Water	4486112
MW-1-W-050318	Grab	Water	4486113
MW-2-W-050318	Grab	Water	4486114
MW-3-W-050318	Grab	Water	4486115
MW-4-W-050318	Grab	Water	4486116
ACMW-1-W-050318	Grab	Water	4486117

1 COPY TO	Cambria C/O Gettler- Ryan	Attn: Deanna L. Harding
ELECTRONIC COPY TO	Gettler-Ryan	Attn: Cheryl Hansen

Lancaster Laboratories

Analysis Report

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Questions? Contact your Client Services Representative
Megan A Moeller at (717) 656-2300.

Respectfully Submitted,

Jenifer Hess
Group Leader

Lancaster Laboratories

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Analysis Report

Lancaster Laboratories Sample No. WW 4486112

QA-T-050318 NA Water
Facility# 94737 Job# 385262 MTI# 61H-1669 GRD
90 Madera-Corte Madera T0604100033 QA
Collected:03/18/2005

Account Number: 10904

Submitted: 03/19/2005 09:45
Reported: 03/29/2005 at 13:34
Discard: 04/29/2005

ChevronTexaco c/o Cambria
Suite 9
4111 Citrus Avenue
Rocklin CA 95677

MCMQA

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01728	TPH-GRO - Waters	n.a.	N.D.	50.	ug/l	1
	The reported concentration of TPH-GRO does not include MTBE or other gasoline constituents eluting prior to the C6 (n-hexane) TPH-GRO range start time.					
06054	BTEX+MTBE by 8260B					
02010	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	ug/l	1
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.5	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.5	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.5	ug/l	1

State of California Lab Certification No. 2116

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
01728	TPH-GRO - Waters	N. CA LUFT Gasoline Method	1	03/24/2005 22:15	Brian C Veety	1
06054	BTEX+MTBE by 8260B	SW-846 8260B	1	03/22/2005 11:51	Ginelle L Haines	1
01146	GC VOA Water Prep	SW-846 5030B	1	03/24/2005 22:15	Brian C Veety	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	03/22/2005 11:51	Ginelle L Haines	n.a.

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Analysis Report

Lancaster Laboratories Sample No. WW 4486113

MW-1-W-050318 Grab Water
Facility# 94737 Job# 385262 MTI# 61H-1669 GRD
90 Madera-Corte Madera T0604100033 MW-1
Collected:03/18/2005 09:35 by KK

Account Number: 10904

Submitted: 03/19/2005 09:45
Reported: 03/29/2005 at 13:34
Discard: 04/29/2005

ChevronTexaco c/o Cambria
Suite 9
4111 Citrus Avenue
Rocklin CA 95677

MCM01

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01728	TPH-GRO - Waters	n.a.	N.D.	50.	ug/l	1
	The reported concentration of TPH-GRO does not include MTBE or other gasoline constituents eluting prior to the C6 (n-hexane) TPH-GRO range start time.					
06610	TPH-DRO CALUFT(Water) w/Si Gel	n.a.	360.	50.	ug/l	1
01594	BTEX+5 Oxygenates+EDC+EDB+ETOH					
01587	Ethanol	64-17-5	N.D.	50.	ug/l	1
02010	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	ug/l	1
02011	di-Isopropyl ether	108-20-3	N.D.	0.5	ug/l	1
02013	Ethyl t-butyl ether	637-92-3	N.D.	0.5	ug/l	1
02014	t-Amyl methyl ether	994-05-8	N.D.	0.5	ug/l	1
02015	t-Butyl alcohol	75-65-0	N.D.	5.	ug/l	1
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05402	1,2-Dichloroethane	107-06-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.5	ug/l	1
05412	1,2-Dibromoethane	106-93-4	N.D.	0.5	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.5	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.5	ug/l	1

State of California Lab Certification No. 2116

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
01728	TPH-GRO - Waters	N. CA LUFT Gasoline Method	1	03/25/2005 03:33	Brian C Veety	1
06610	TPH-DRO CALUFT(Water) w/Si Gel	CALUFT-DRO/8015B, Modified	1	03/25/2005 09:37	Tracy A Cole	1
01594	BTEX+5 Oxygenates+EDC+EDB+ETOH	SW-846 8260B	1	03/24/2005 15:41	Ginelle L Haines	1
01146	GC VOA Water Prep	SW-846 5030B	1	03/25/2005 03:33	Brian C Veety	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	03/24/2005 15:41	Ginelle L Haines	n.a.
02135	Extraction - DRO Water Special	TPH by CA LUFT	1	03/22/2005 07:30	Danette S Blystone	1

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Analysis Report

Lancaster Laboratories Sample No. WW 4486114

MW-2-W-050318 Grab Water
Facility# 94737 Job# 385262 MTI# 61H-1669 GRD
90 Madera-Corte Madera T0604100033 MW-2
Collected:03/18/2005 10:10 by KK

Account Number: 10904

Submitted: 03/19/2005 09:45
Reported: 03/29/2005 at 13:34
Discard: 04/29/2005

ChevronTexaco c/o Cambria
Suite 9
4111 Citrus Avenue
Rocklin CA 95677

MCM02

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01728	TPH-GRO - Waters	n.a.	670.	100.	ug/l	2
	The reported concentration of TPH-GRO does not include MTBE or other gasoline constituents eluting prior to the C6 (n-hexane) TPH-GRO range start time.					
06610	TPH-DRO CALUFT(Water) w/Si Gel	n.a.	410.	50.	ug/l	1
01594	BTEX+5 Oxygenates+EDC+EDB+ETOH					
01587	Ethanol	64-17-5	N.D.	50.	ug/l	1
02010	Methyl Tertiary Butyl Ether	1634-04-4	36.	0.5	ug/l	1
02011	di-Isopropyl ether	108-20-3	N.D.	0.5	ug/l	1
02013	Ethyl t-butyl ether	637-92-3	N.D.	0.5	ug/l	1
02014	t-Amyl methyl ether	994-05-8	4.	0.5	ug/l	1
02015	t-Butyl alcohol	75-65-0	6.	5.	ug/l	1
05401	Benzene	71-43-2	1.	0.5	ug/l	1
05402	1,2-Dichloroethane	107-06-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.5	ug/l	1
05412	1,2-Dibromoethane	106-93-4	N.D.	0.5	ug/l	1
05415	Ethylbenzene	100-41-4	2.	0.5	ug/l	1
06310	Xylene (Total)	1330-20-7	0.5	0.5	ug/l	1

State of California Lab Certification No. 2116

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
01728	TPH-GRO - Waters	N. CA LUFT Gasoline Method	1	03/25/2005 04:01	Brian C Veety	2
06610	TPH-DRO CALUFT(Water) w/Si Gel	CALUFT-DRO/8015B, Modified	1	03/25/2005 10:01	Tracy A Cole	1
01594	BTEX+5 Oxygenates+EDC+EDB+ETOH	SW-846 8260B	1	03/24/2005 16:06	Ginelle L Haines	1
01146	GC VOA Water Prep	SW-846 5030B	1	03/25/2005 04:01	Brian C Veety	2
01163	GC/MS VOA Water Prep	SW-846 5030B	1	03/24/2005 16:06	Ginelle L Haines	n.a.
02135	Extraction - DRO Water Special	TPH by CA LUFT	1	03/22/2005 07:30	Danette S Blystone	1

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Analysis Report

Lancaster Laboratories Sample No. WW 4486115

MW-3-W-050318 Grab Water
Facility# 94737 Job# 385262 MTI# 61H-1669 GRD
90 Madera-Corte Madera T0604100033 MW-3
Collected:03/18/2005 09:00 by KK

Account Number: 10904

Submitted: 03/19/2005 09:45
Reported: 03/29/2005 at 13:34
Discard: 04/29/2005

ChevronTexaco c/o Cambria
Suite 9
4111 Citrus Avenue
Rocklin CA 95677

MCM03

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01728	TPH-GRO - Waters	n.a.	N.D.	50.	ug/l	1
	The reported concentration of TPH-GRO does not include MTBE or other gasoline constituents eluting prior to the C6 (n-hexane) TPH-GRO range start time.					
06610	TPH-DRO CALUFT(Water) w/Si Gel	n.a.	930.	50.	ug/l	1
01594	BTEX+5 Oxygenates+EDC+EDB+ETOH					
01587	Ethanol	64-17-5	N.D.	50.	ug/l	1
02010	Methyl Tertiary Butyl Ether	1634-04-4	150.	0.5	ug/l	1
02011	di-Isopropyl ether	108-20-3	N.D.	0.5	ug/l	1
02013	Ethyl t-butyl ether	637-92-3	N.D.	0.5	ug/l	1
02014	t-Amyl methyl ether	994-05-8	7.	0.5	ug/l	1
02015	t-Butyl alcohol	75-65-0	260.	5.	ug/l	1
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05402	1,2-Dichloroethane	107-06-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.5	ug/l	1
05412	1,2-Dibromoethane	106-93-4	N.D.	0.5	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.5	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.5	ug/l	1

State of California Lab Certification No. 2116

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
01728	TPH-GRO - Waters	N. CA LUFT Gasoline Method	1	03/25/2005 04:30	Brian C Veety	1
06610	TPH-DRO CALUFT(Water) w/Si Gel	CALUFT-DRO/8015B, Modified	1	03/25/2005 10:25	Tracy A Cole	1
01594	BTEX+5 Oxygenates+EDC+EDB+ETOH	SW-846 8260B	1	03/24/2005 16:31	Ginelle L Haines	1
01146	GC VOA Water Prep	SW-846 5030B	1	03/25/2005 04:30	Brian C Veety	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	03/24/2005 16:31	Ginelle L Haines	n.a.
02135	Extraction - DRO Water Special	TPH by CA LUFT	1	03/22/2005 07:30	Danette S Blystone	1

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Analysis Report

Lancaster Laboratories Sample No. WW 4486116

MW-4-W-050318 Grab Water
Facility# 94737 Job# 385262 MTI# 61H-1669 GRD
90 Madera-Corte Madera T0604100033 MW-4
Collected:03/18/2005 08:00 by KK

Account Number: 10904

Submitted: 03/19/2005 09:45
Reported: 03/29/2005 at 13:34
Discard: 04/29/2005

ChevronTexaco c/o Cambria
Suite 9
4111 Citrus Avenue
Rocklin CA 95677

MCM04

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01728	TPH-GRO - Waters	n.a.	N.D.	50.	ug/l	1
	The reported concentration of TPH-GRO does not include MTBE or other gasoline constituents eluting prior to the C6 (n-hexane) TPH-GRO range start time. The vial submitted for volatile analysis did not have a pH < 2 at the time of analysis. Due to the volatile nature of the analytes, it is not appropriate for the laboratory to adjust the pH at the time of sample receipt. The pH of this sample was pH = 7.					
06610	TPH-DRO CALUFT(Water) w/Si Gel	n.a.	210.	50.	ug/l	1
01594	BTEX+5 Oxygenates+EDC+EDB+ETOH					
01587	Ethanol	64-17-5	N.D.	50.	ug/l	1
02010	Methyl Tertiary Butyl Ether	1634-04-4	1.	0.5	ug/l	1
02011	di-Isopropyl ether	108-20-3	N.D.	0.5	ug/l	1
02013	Ethyl t-butyl ether	637-92-3	N.D.	0.5	ug/l	1
02014	t-Amyl methyl ether	994-05-8	N.D.	0.5	ug/l	1
02015	t-Butyl alcohol	75-65-0	N.D.	5.	ug/l	1
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05402	1,2-Dichloroethane	107-06-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	0.5	0.5	ug/l	1
05412	1,2-Dibromoethane	106-93-4	N.D.	0.5	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.5	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.5	ug/l	1

State of California Lab Certification No. 2116

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
01728	TPH-GRO - Waters	N. CA LUFT Gasoline Method	1	03/25/2005 09:32	Brian C Veety	1
06610	TPH-DRO CALUFT(Water) w/Si Gel	CALUFT-DRO/8015B, Modified	1	03/25/2005 14:27	Tracy A Cole	1
01594	BTEX+5 Oxygenates+EDC+EDB+ETOH	SW-846 8260B	1	03/24/2005 17:21	Ginelle L Haines	1
01146	GC VOA Water Prep	SW-846 5030B	1	03/25/2005 09:32	Brian C Veety	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	03/24/2005 17:21	Ginelle L Haines	n.a.
02135	Extraction - DRO Water Special	TPH by CA LUFT	1	03/22/2005 07:30	Danette S Blystone	1

Lancaster Laboratories

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Analysis Report

Lancaster Laboratories Sample No. WW 4486116

MW-4-W-050318 Grab Water
Facility# 94737 Job# 385262 MTI# 61H-1669 GRD
90 Madera-Corte Madera T0604100033 MW-4
Collected:03/18/2005 08:00 by KK

Account Number: 10904

Submitted: 03/19/2005 09:45
Reported: 03/29/2005 at 13:34
Discard: 04/29/2005

ChevronTexaco c/o Cambria
Suite 9
4111 Citrus Avenue
Rocklin CA 95677

MCM04

Lancaster Laboratories

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Analysis Report

Lancaster Laboratories Sample No. WW 4486117

ACMW-1-W-050318 Grab Water
Facility# 94737 Job# 385262 MTI# 61H-1669 GRD
90 Madera-Corte Madera T0604100033 ACMW-1
Collected:03/18/2005 08:35 by KK

Account Number: 10904

Submitted: 03/19/2005 09:45
Reported: 03/29/2005 at 13:34
Discard: 04/29/2005

ChevronTexaco c/o Cambria
Suite 9
4111 Citrus Avenue
Rocklin CA 95677

MCMA1

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01728	TPH-GRO - Waters	n.a.	N.D.	50.	ug/l	1
	The reported concentration of TPH-GRO does not include MTBE or other gasoline constituents eluting prior to the C6 (n-hexane) TPH-GRO range start time.					
06610	TPH-DRO CALUFT(Water) w/Si Gel	n.a.	100.	50.	ug/l	1
01594	BTEX+5 Oxygenates+EDC+EDB+ETOH					
01587	Ethanol	64-17-5	N.D.	50.	ug/l	1
02010	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	ug/l	1
02011	di-Isopropyl ether	108-20-3	N.D.	0.5	ug/l	1
02013	Ethyl t-butyl ether	637-92-3	N.D.	0.5	ug/l	1
02014	t-Amyl methyl ether	994-05-8	N.D.	0.5	ug/l	1
02015	t-Butyl alcohol	75-65-0	N.D.	5.	ug/l	1
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05402	1,2-Dichloroethane	107-06-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.5	ug/l	1
05412	1,2-Dibromoethane	106-93-4	N.D.	0.5	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.5	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.5	ug/l	1

State of California Lab Certification No. 2116

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
01728	TPH-GRO - Waters	N. CA LUFT Gasoline Method	1	03/25/2005 05:28	Brian C Veety	1
06610	TPH-DRO CALUFT(Water) w/Si Gel	CALUFT-DRO/8015B, Modified	1	03/25/2005 10:49	Tracy A Cole	1
01594	BTEX+5 Oxygenates+EDC+EDB+ETOH	SW-846 8260B	1	03/24/2005 17:46	Ginelle L Haines	1
01146	GC VOA Water Prep	SW-846 5030B	1	03/25/2005 05:28	Brian C Veety	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	03/24/2005 17:46	Ginelle L Haines	n.a.
02135	Extraction - DRO Water Special	TPH by CA LUFT	1	03/22/2005 07:30	Danette S Blystone	1

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Analysis Report

Quality Control Summary

Client Name: ChevronTexaco c/o Cambria
Reported: 03/29/05 at 01:34 PM

Group Number: 936086

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 050800017A	Sample number(s): 4486113-4486117							
TPH-DRO CALUFT(Water) w/Si Gel	N.D.	25.	ug/l	85	70	61-130	19	20
Batch number: 05083A08B	Sample number(s): 4486112							
TPH-GRO - Waters	N.D.	50.	ug/l	106	107	70-130	1	30
Batch number: 05083A08C	Sample number(s): 4486113-4486115,4486117							
TPH-GRO - Waters	N.D.	50.	ug/l	106	107	70-130	1	30
Batch number: 05083A08D	Sample number(s): 4486116							
TPH-GRO - Waters	N.D.	50.	ug/l	106	107	70-130	1	30
Batch number: Z050812AA	Sample number(s): 4486112							
Methyl Tertiary Butyl Ether	N.D.	0.5	ug/l	91		77-127		
Benzene	N.D.	0.5	ug/l	93		85-117		
Toluene	N.D.	0.5	ug/l	97		85-115		
Ethylbenzene	N.D.	0.5	ug/l	95		82-119		
Xylene (Total)	N.D.	0.5	ug/l	96		83-113		
Batch number: Z050831AA	Sample number(s): 4486113-4486117							
Ethanol	N.D.	50.	ug/l	95		30-155		
Methyl Tertiary Butyl Ether	N.D.	0.5	ug/l	87		77-127		
di-Isopropyl ether	N.D.	0.5	ug/l	84		67-130		
Ethyl t-butyl ether	N.D.	0.5	ug/l	86		74-120		
t-Amyl methyl ether	N.D.	0.5	ug/l	85		79-113		
t-Butyl alcohol	N.D.	5.	ug/l	90		57-141		
Benzene	N.D.	0.5	ug/l	90		85-117		
1,2-Dichloroethane	N.D.	0.5	ug/l	99		77-132		
Toluene	N.D.	0.5	ug/l	88		85-115		
1,2-Dibromoethane	N.D.	0.5	ug/l	85		81-114		
Ethylbenzene	N.D.	0.5	ug/l	95		82-119		
Xylene (Total)	N.D.	0.5	ug/l	95		83-113		

Sample Matrix Quality Control

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 05083A08B	Sample number(s): 4486112								
TPH-GRO - Waters	136		63-154						
Batch number: 05083A08C	Sample number(s): 4486113-4486115,4486117								

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The background result was more than four times the spike added.

Quality Control Summary

Client Name: ChevronTexaco c/o Cambria Group Number: 936086
Reported: 03/29/05 at 01:34 PM

Sample Matrix Quality Control

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
TPH-GRO - Waters	136		63-154						
Batch number: 05083A08D	Sample number(s): 4486116								
TPH-GRO - Waters	136		63-154						
Batch number: Z050812AA	Sample number(s): 4486112								
Methyl Tertiary Butyl Ether	87	90	69-134	3	30				
Benzene	97	96	83-128	1	30				
Toluene	100	100	83-127	0	30				
Ethylbenzene	99	100	82-129	0	30				
Xylene (Total)	100	101	82-130	1	30				
Batch number: Z050831AA	Sample number(s): 4486113-4486117								
Ethanol	105	91	26-153	14	30				
Methyl Tertiary Butyl Ether	89	89	69-134	0	30				
di-Isopropyl ether	83	83	75-130	1	30				
Ethyl t-butyl ether	86	87	78-119	1	30				
t-Amyl methyl ether	89	88	77-117	1	30				
t-Butyl alcohol	89	91	51-147	2	30				
Benzene	95	96	83-128	0	30				
1,2-Dichloroethane	96	97	73-136	1	30				
Toluene	98	100	83-127	1	30				
1,2-Dibromoethane	93	94	78-120	2	30				
Ethylbenzene	98	97	82-129	1	30				
Xylene (Total)	99	97	82-130	3	30				

Surrogate Quality Control

Analysis Name: TPH-DRO CALUFT(Water) w/Si Gel
Batch number: 050800017A

	Orthoterphenyl
4486113	97
4486114	95
4486115	80
4486116	89
4486117	84
Blank	91
LCS	115
LCSD	111
Limits:	35-136

Analysis Name: TPH-GRO - Waters
Batch number: 05083A08B

	Trifluorotoluene-F
4486112	114
Blank	113
LCS	116
LCSD	115
MS	119

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The background result was more than four times the spike added.

Quality Control Summary

Client Name: ChevronTexaco c/o Cambria Group Number: 936086
Reported: 03/29/05 at 01:34 PM

Surrogate Quality Control

Limits: 70-142

Analysis Name: TPH-GRO - Waters
Batch number: 05083A08C

	Trifluorotoluene-F
4486113	115
4486114	114
4486115	110
4486117	115
Blank	112
LCS	116
LCSD	115
MS	119
Limits:	70-142

Analysis Name: TPH-GRO - Waters
Batch number: 05083A08D

	Trifluorotoluene-F
4486116	114
Blank	114
LCS	116
LCSD	115
MS	119
Limits:	70-142

Analysis Name: BTEX+MTBE by 8260B
Batch number: Z050812AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
4486112	95	88	94	93
Blank	97	89	102	91
LCS	96	90	95	95
MS	97	90	95	95
MSD	97	87	93	95
Limits:	81-120	82-112	85-112	83-113

Analysis Name: BTEX+5 Oxygenates+EDC+EDB+ETOH
Batch number: Z050831AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
4486113	98	92	94	92
4486114	96	92	92	99
4486115	96	93	89	90
4486116	99	95	91	86
4486117	97	92	91	87
Blank	84	90	92	87
LCS	94	94	85	92
MS	95	89	90	90
MSD	95	91	92	91
Limits:	81-120	82-112	85-112	83-113

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The background result was more than four times the spike added.

Quality Control Summary

Client Name: ChevronTexaco c/o Cambria Group Number: 936086
Reported: 03/29/05 at 01:34 PM

Surrogate Quality Control

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The background result was more than four times the spike added.

Chevron California Region Analysis Request/Chain of Custody

Lancaster Laboratories
Where quality is a science.

03805-07 Acct. #: 10904 For Lancaster Laboratories use only Sample #: 4486112-17 SCR#: 936086

Cambria MTI Project #: 61H-1669

Facility #: SS#9-4737 G-R#385262 Global ID#T0604100033
Site Address: 90 MADERA BLVD., CORTE MADERA, CA
Chevron PM: MTI Lead Consultant: CAMBRIABE
Consultant/Office: G-R, Inc., 6747 Sierra Court, Suite J, Dublin, Ca. 94568
Consultant Prj. Mgr.: Deanna L. Harding (deanna@grinc.com)
Consultant Phone #: 925-551-7555 Fax #: 925-551-7899
Sampler: Kristina Kelly
Service Order #: ☐ Non SAR:

Preservative Codes
H = HCl T = Thiosulfate
N = HNO_3 B = NaOH
S = H_2SO_4 O = Other

☐ J value reporting needed
☒ Must meet lowest detection limits possible for 8260 compounds

8021 MTBE Confirmation
☐ Confirm highest hit by 8260
☐ Confirm all hits by 8260
☐ Run ____ oxy s on highest hit
☐ Run ____ oxy s on all hits

Sample Identification	Date Collected	Time Collected	Grab	Composite	Matrix: Soil	Matrix: Potable ☐ NPDES ☐ Water	Matrix: Oil ☐ Air ☐	Total Number of Containers	Analyses Requested / Preservation Codes: BTEX + MTBE 8260 ☒ 8021 ☐	TPH 8015 MOD GRO	TPH 8015 MOD DRO	Silica Gel Cleanup	8260 full scan	Oxygenates (8260)	Lead 7420 ☐ 7421 ☐
QA	3-28-05					W		2	X	X					
MW-1		0935	X					8	X	X	X			X	
MW-2		1010	X					8	X	X	X			X	
MW-3		0900	X					8	X	X	X			X	
MW-4		0800	X					8	X	X	X			X	
AC MW-1	V	0835	X			V		8	X	X	X			X	
											MM 3/28/05				

Comments / Remarks
TPH DRO w/ Si Gel needed.
MM 3/28/05

Turnaround Time Requested (TAT) (please circle)
STD. TAT 72 hour 48 hour
24 hour 4 day 5 day

Data Package Options (please circle if required)
QC Summary Type I — Full
Type VI (Raw Data) ☐ Coelt Deliverable not needed
WIP (RWQCB)
Disk
EDF/EDD

	Date	Time		Date	Time
Relinquished by: Kristina Kelly	3/18/05	1350	Received by: Bernardo Amaya	3/18/05	1350
Relinquished by: Bernardo Amaya	3/18/05	1530	Received by: FedEx	3/18/05	
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by Commercial Carrier: UPS FedEx Other			Received by:	Date	Time
Temperature Upon Receipt 2.5°, 2.4°C, 2.5°, 1.7°			Custody Seals Intact? Yes No	3/19/05	0945

Lancaster Laboratories
2425 New Holland Pike • Lancaster, PA 17601

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

N.D.	none detected	**BMQL**	Below Minimum Quantitation Level
TNTC	Too Numerous To Count	**MPN**	Most Probable Number
IU	International Units	**CP Units**	cobalt-chloroplatinate units
umhos/cm	micromhos/cm	**NTU**	nephelometric turbidity units
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
ug	microgram(s)	**mg**	milligram(s)
ml	milliliter(s)	**l**	liter(s)
m3	cubic meter(s)	**ul**	microliter(s)

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

J estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike sample not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*****	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results for methods listed on the laboratories' accreditation scope meet all requirements of NELAC unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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CAMBRIA

ATTACHMENT E

Standard Field Procedures for Borings and Wells

STANDARD FIELD PROCEDURES FOR MONITORING WELL INSTALLATION

This document presents standard field methods for drilling and sampling soil borings and installing, developing and sampling groundwater monitoring wells. These procedures are designed to comply with Federal, State and local regulatory guidelines. Specific field procedures are summarized below.

DRILLING AND SAMPLING

Objectives

Soil samples are collected to characterize subsurface lithology, assess whether the soils exhibit obvious hydrocarbon or other compound vapor or staining, and to collect samples for analysis at a State-certified laboratory. All borings are logged using the Unified Soil Classification System by a trained geologist working under the supervision of a California Professional Geologist (PG).

Soil Boring and Sampling

Soil borings are typically drilled using hollow-stem augers or direct-push technologies such as the Geoprobe®. Prior to drilling, the first 8 feet of the boring are cleared using an air or water knife and vacuum extraction. This minimizes the potential for impacting utilities.

Soil samples are collected at least every five feet to characterize the subsurface sediments and for possible chemical analysis. Additional soil samples are collected near the water table and at lithologic changes. Samples are collected using lined split-barrel or equivalent samplers driven into undisturbed sediments at the bottom of the borehole.

Drilling and sampling equipment is steam-cleaned prior to drilling and between borings to prevent cross-contamination. Sampling equipment is washed between samples with trisodium phosphate or an equivalent EPA-approved detergent.

Sample Analysis

Sampling tubes chosen for analysis are trimmed of excess soil and capped with Teflon tape and plastic end caps. Soil samples are labeled and stored at or below 4° C on either crushed or dry ice, depending upon local regulations. Samples are transported under chain-of-custody to a State-certified analytic laboratory.

Field Screening

One of the remaining tubes is partially emptied leaving about one-third of the soil in the tube. The tube is capped with plastic end caps and set aside to allow hydrocarbons to volatilize from the soil. After ten to fifteen minutes, a portable volatile vapor analyzer measures volatile hydrocarbon vapor concentrations in the tube headspace, extracting the vapor through a slit in the cap. Volatile vapor analyzer measurements are used along with the field observations, odors, stratigraphy and groundwater depth to select soil samples for analysis.

Water Sampling

Water samples, if they are collected from the boring, are either collected using a driven Hydropunch® type sampler or are collected from the open borehole using bailers. The groundwater samples are decanted into the appropriate containers supplied by the analytical laboratory. Samples are labeled, placed in protective foam sleeves, stored on crushed ice at or below 4°C, and transported under chain-of-custody to the laboratory. Laboratory-supplied trip blanks accompany the samples and are analyzed to check for cross-contamination. An equipment blank may be analyzed if non-dedicated sampling equipment is used.

MONITORING WELL INSTALLATION, DEVELOPMENT AND SAMPLING

Well Construction and Surveying

Groundwater monitoring wells are installed to monitor groundwater quality and determine the groundwater elevation, flow direction and gradient. Well depths and screen lengths are based on groundwater depth, occurrence of hydrocarbons or other compounds in the borehole, stratigraphy and State and local regulatory guidelines. Well screens typically extend 10 to 15 feet below and 5 feet above the static water level at the time of drilling. However, the well screen will generally not extend into or through a clay layer that is at least three feet thick.

Well casing and screen are flush-threaded, Schedule 40 PVC. Screen slot size varies according to the sediments screened, but slots are generally 0.010 or 0.020 inches wide. A rinsed and graded sand occupies the annular space between the boring and the well screen to about one to two feet above the well screen. A two foot thick hydrated bentonite seal separates the sand from the overlying sanitary surface seal composed of Portland type I,II cement.

Well-heads are secured by locking well-caps inside traffic-rated vaults finished flush with the ground surface. A stovepipe may be installed between the well-head and the vault cap for additional security.

The well top-of-casing elevation is surveyed with respect to mean sea level and the well is surveyed for horizontal location with respect to an onsite or nearby offsite landmark.

Well Development

Wells are generally developed using a combination of groundwater surging and extraction. Surging agitates the groundwater and dislodges fine sediments from the sand pack. After about ten minutes of surging, groundwater is extracted from the well using bailing, pumping and/or reverse air-lifting through an eductor pipe to remove the sediments from the well. Surging and extraction continue until at least ten well-casing volumes of groundwater are extracted and the sediment volume in the groundwater is negligible. This process usually occurs prior to installing the sanitary surface seal to ensure sand pack stabilization. If development occurs after surface seal installation, then development occurs 24 to 72 hours after seal installation to ensure that the Portland cement has set up correctly.

All equipment is steam-cleaned prior to use and air used for air-lifting is filtered to prevent oil entrained in the compressed air from entering the well. Wells that are developed using air-lift evacuation are not sampled until at least 24 hours after they are developed.

Groundwater Sampling

Depending on local regulatory guidelines, three to four well-casing volumes of groundwater are purged prior to sampling. Purging continues until groundwater pH, conductivity, and temperature have stabilized. Groundwater samples are collected using bailers or pumps and are decanted into the appropriate containers supplied by the analytical laboratory. Samples are labeled, placed in protective foam sleeves, stored on crushed ice at or below 4°C, and transported under chain-of-custody to the laboratory. Laboratory-supplied trip blanks accompany the samples and are analyzed to check for cross-contamination. An equipment blank may be analyzed if non-dedicated sampling equipment is used.

Waste Handling and Disposal

Soil cuttings from drilling activities are usually stockpiled onsite and covered by plastic sheeting. At least three individual soil samples are collected from the stockpiles and composited at the analytical laboratory. The composite sample is analyzed for the same constituents analyzed in the borehole samples in addition to any analytes required by the receiving disposal facility. Soil cuttings are transported by licensed waste haulers and disposed in secure, licensed facilities based on the composite analytic results.

Groundwater removed during development and sampling is typically stored onsite in sealed 55-gallon drums. Each drum is labeled with the drum number, date of generation, suspected contents, generator identification and consultant contact. Upon receipt of analytic results, the water is either pumped out using a vacuum truck for transport to a licensed waste treatment/disposal facility or the individual drums are picked up and transported to the waste facility where the drum contents are removed and appropriately disposed.

CAMBRIA

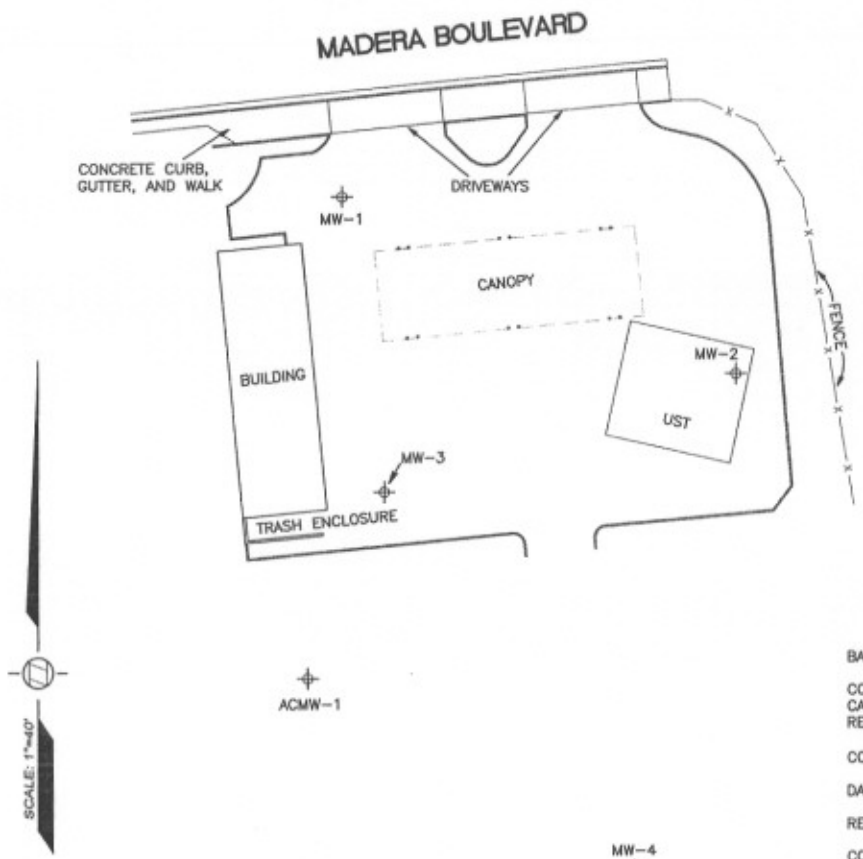
ATTACHMENT F

Well Survey Data

Monitoring Well Exhibit

Prepared For:

Cambria Environmental



DESCRIPTION	NORTHING	EASTING	ELEV (PVC)	ELEV (BOX)
MW-1	2167238.5	5980083.1	5.39	5.97
MW-2	2167181.5	5980211.4	4.60	5.76
MW-3	2167143.2	5980096.9	6.04	6.46
MW-4	2167020.0	5980178.5	3.41	3.68
ACMW-1	2167082.1	5980072.1	4.14	4.46

DESCRIPTION	LATITUDE	LONGINTUDE
MW-1	37.9296584	-122.5166051
MW-2	37.9295096	-122.5161561
MW-3	37.9293974	-122.5165501
MW-4	37.9290640	-122.5162582
ACMW-1	37.9292284	-122.5166317

BASIS OF COORDINATES AND ELEVATIONS:

COORDINATES ARE CALIFORNIA STATE PLANE ZONE 3 COORDINATES FROM GPS OBSERVATIONS USING UNIVERSITY OF CALIFORNIA BAY AREA DEFORMATION CORS STATION OBSERVATION FILES AND BASED ON THE CALIFORNIA SPATIAL REFERENCE CENTER DATUM, REFERENCE EPOCH 2000.35.

COORDINATE DATUM IS NAD 83(1986).

DATUM ELLIPSOID IS GRS80.

REFERENCE GEOID IS NGS99.

CORS STATIONS USED WERE UCD1 AND DIAB.

VERTICAL DATUM IS NAVD 88 FROM GPS OBSERVATIONS.

0 20 40 80 120

SCALE IN FEET

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Date: 3-29-05
Scale: 1" = 40'
Sheet 1 of 1
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Field Book: MW-16
Dwg. No. 0857-038 CT